## Read STAR-CD Data

### INTRODUCTION

EnSight supports files as written from STAR-CD (a commercial CFD solver). Version 2.2 and 2.3 are supported. (Note that a separate translator (which outputs EnSight 5 files) for STAR-CD version 3.0 is provided.) EnSight can read both steady-state (file09) as well as transient (file29) results data. EnSight creates parts based on the table of types for normal elements and on types for boundaries (from file16). Note that some STAR-CD variables are element-based. EnSight will interpolate these values to the nodes.

**NOTE**: ProStar version 3.05 will now output the native EnSight format. For instructions and examples, see the file \$ENSIGHT6\_HOME/translators/star-cd/README.DIRECT.

Reading data into EnSight is a two-step process. First, the appropriate files are selected. This step is largely the same regardless of the format of the data being read. Second, parts are constructed using an interface that is specific to the applicable data format. This article covers the second step for STAR-CD data. See **How To Read Data** for more information on selecting the appropriate files.

STAR-CD datasets consist of the following files. Note that the entry in the File Name column is only a suggestion – it typically does not matter to EnSight what the actual file name is.

File	File Name	Notes	Required?
Geometry	file16	Contains coordinates and element connectivity	required
Static Results	file09	Steady-state variables	optional
Transient Results	file29	Transient variable	optional

### **BASIC OPERATION**

After you have specified the appropriate data files with the File Selector (opened with File > Data (Reader)... as discussed in **How To Read Data**) and clicked Okay, the Data Part Loader (STAR-CD) dialog will open. You use this dialog to build the desired parts. To build parts for STAR-CD format data:

# 1. If the Data Part Loader dialog is not open, select File > Data (Part Loader)...

All parts defined in the file16 file will be loaded to the EnSight server. However, you have a choice for the initial visual representation of some parts as displayed on the client. The choice is made with the Load pulldown:

All Parts: all parts are loaded to the client in the default visual representation (typically 3D Border, 2D Full).

Part 1 Only: Only the first part is loaded to the client in the default visual representation. The other parts will have the NonVisual representation.

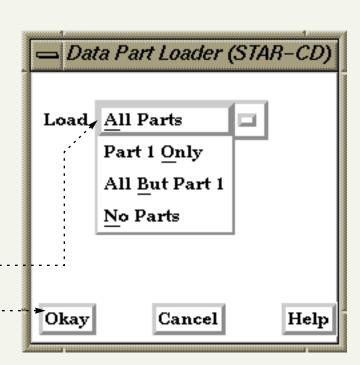
All But Part 1: All parts *other* than part 1 are loaded to the client in the default visual representation. Part 1 will be NonVisual.

No Parts: No parts are loaded to the client (*i.e.* the representation of all parts is set to NonVisual).

Note that you can easily change the visual representation of a part at any time. See **How To Change Visual Representation** for more information.

2. Select the desired Load option.

3. Click Okay.





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## **OTHER NOTES**

You can reopen the Data Part Loader dialog at any time to build additional parts. Simply select File > Data Part Loader)... and build the desired parts as described above.

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### **SEE ALSO**

**How To Read Data** 

User Manual: Reading STAR-CD Files

